

## WHAT IS CLAIMED IS:

1. An electronic commercial transaction supporting method, comprising:

extracting, by a cell operation of a technique of cellular information theory, correspondence relations between attributes determined by respective viewpoints of a plurality of subjects involved in an electronic commercial transaction;

recording the extracted correspondence relations; and  
presenting the recorded correspondence relations at a stage of an electronic commercial transaction.

2. An electronic commercial transaction supporting method, comprising:

specifying correspondence relations between attributes determined by respective viewpoints of a plurality of subjects involved in an electronic commercial transaction based on a predetermined equivalence relation;

extracting the specified correspondence relation by a cell operation based on cellular information theory;

accumulating extracted correspondence relations in a data table, based on actual examples of an electronic commercial transaction; and

presenting the accumulated correspondence relations as a

part of another electronic commercial transaction, by referring to the data table.

3. An electronic commercial transaction supporting method, comprising:

extracting, based on a predetermined equivalence relation, an attribute that is an object of interest common to a plurality of subjects involved in an electronic commercial transaction using a method of cell decomposition in cellular information theory; and

adding the extracted attribute to a cellular space corresponding to each of the plurality of subjects using a cell attachment.

4. An electronic commercial transaction supporting method, comprising:

extracting a correspondence relation between attributes that are objects of interest for a plurality of subjects involved in an electronic commercial transaction, from a stage of the electronic commercial transaction;

storing the extracted correspondence relation; and

presenting the stored correspondence relation at a stage of another electronic commercial transaction.

5. A method according to Claim 4, wherein said extracting, storing and said presenting are repeated cyclically in such a way as to effect feedback.

6. An electronic commercial transaction supporting system, comprising:

a plurality of shops which are connected to a network and present merchandise to customers via the network, wherein each shop of said plurality of shops comprises a data table which records correspondence relations between attributes that are objects of interest for a plurality of respective subjects in an electronic commercial transaction at a stage of the transaction; and

a business information management system connected to the network, wherein said business information management system comprises a first functional block which transversely refers to respective data tables of said plurality of shops.

7. A system according to Claim 6, wherein said business information management system further comprises a second functional block which detects a desired correspondence relation from the correspondence relations recorded in the data tables of any of said plurality of shops.

8. A system according to Claim 7, wherein said business information management system further comprises a third functional block which presents the detected desired correspondence relation at a stage of an electronic commercial transaction at any of said plurality of shops or at another shop.

9. A system according to Claim 6, wherein a shop of said plurality of shops further comprises a local business information management block which manages the data table.

10. A system according to Claim 7, wherein a shop of said plurality of shops further comprises a local business information management block which manages the data table.

11. A system according to Claim 8, wherein a shop of said plurality of shops further comprises a local business information management block which manages the data table.

12. A system according to Claim 9, wherein said local business information management block comprises a maintaining functional block which inspects correspondence relations and suitably modifies the correspondence relations.

13. A system according to Claim 10, wherein said local business information management block includes a maintaining functional block which inspects correspondence relations and suitably modifies the correspondence relations.

14. A system according to Claim 11, wherein said local business information management block includes a maintaining functional block which inspects correspondence relations and suitably modifies the correspondence relations.

15. A system according to Claim 12, wherein said maintaining functional block detects an inconsistent correspondence relation among the recorded correspondence relations and deletes said inconsistent correspondence relation from the data table.

16. A system according to Claim 13, wherein said maintaining functional block detects an inconsistent correspondence relation among the recorded correspondence relations and deletes said inconsistent correspondence relation from the data table.

17. A system according to Claim 14, wherein said maintaining functional block detects an inconsistent correspondence

relation among the recorded correspondence relations and deletes said inconsistent correspondence relation from the data table.

18. A business information management system based on cellular information theory, comprising:

a first functional block which:

generalizes a join operation in a relational model by an identification based on an equivalence class; and records correspondence relations between attributes that are objects of interest for a plurality of subjects involved in a business, by the identification in a local circumstance where the business is carried out;

a second functional block which reads out a desired correspondence relation from the recorded correspondence relations and reuses the desired correspondence relation at a stage of another business; and

a third functional block which maintains or updates the recorded correspondence relations based on a result of the business,

wherein a correspondence relation between attributes formed locally is made available globally by said functional blocks using a modeling guideline that does not assume the existence of a management entity who uniformly manages all the

attributes or interdependence relations of data.

19. A business information management system according to Claim 18, wherein the identification in said first functional block comprises a common subspace of cells corresponding to the respective attributes interest to one another, the common subspace being extracted by a cell decomposition operation.

20. A business information management system according to Claim 19, wherein, in said second functional block, a cell corresponding to the common subspace is attached to the cells corresponding to the respective attributes by a cell attaching operation.